DOCUMENT RESUME

ED 298 384 CG 021 065

AUTHOR Steitz, Jean A.; Verner, Betty S.
TITLE What Do Adolescents Know about Aging?
PUB DATE Apr 87
NOTE 24p.; Paper presented at the Annual Meeting of the American Educational Research Association (Washington, DC, April 20-24, 1987).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Adolescents; *Aging (Individuals); Grandparents; High Schools; High School Students; *Interpersonal Relationship; *Knowledge Level; *Older Adults; Sex Differences; *Student Attitudes

ABSTRACT

Increasing the amount of contact with older persons is often proposed as a way to inform young people about aging. This study compared adolescents' knowledge of aging with the amount and quality of contact they had with an older person and compared knowledge of aging in a 1978 sample of adolescents with knowledge in a 1985 sample. For the 1985 sample, questionnaires were administered to students (N=213) in four high schools. Subjects were asked if they had contact with an older person, their relationship to that person, and the older person's gender and place of residence. Knowledge was assessed by the Facts on Aging Quiz. Of the 206 respondents who reported having contact with an older person, 80% chose a grandparent to evaluate and 8% chose a great-grandparent. The 1985 sample answered only 57% of the knowledge questions correctly, indicating that they had a great deal of misinformation or lack of information about aging and older adults. Profiles of the responses on individual items from the Facts on Aging Quiz revealed qualitative differences due to gender, degree of contact, and changes over time in the nature of the adolescents' knowledge of aging. (NB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED298384

WHAT DO ADOLESCENTS KNOW ABOUT AGING?

Jean A. Steitz and Betty S. Verner

Memphis State University

CG 021065

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Jean A. Steitz

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented at the annual meeting of the American Educational Research Association, Washington, 1987. Direct all correspondence to Jean A. Steitz, PhD, Foundations of Education, Memphis State University, Memphis, TN 38152.

Abstract

Increasing the amount of contact with older adults is often proposed as a way to inform young people about aging. This study compares adolescents' knowledge of aging with the amount and quality of contact they have with an older adult and compares adolescents' knowledge of aging in 1978 with their knowledge in 1985. The results indicate that the adolescents have a great deal of misinformation or lack of information about aging and older adults. Profiles of the responses on individual items from Palmore's "Facts on Aging" reveal qualitative differences due to sex, degree of contact, and changes over time in the nature of the adolescents' knowledge of aging. How adolescents perceive older adults and the implications this has for educational efforts are discussed.

What Do Adolescents Know About Aging?

As the population of those over 65 increases, we as a society are becoming more aware and knowledgeable of the benefits and problems related to getting older. Yet, negative stereotypes and inaccurate information relative to the process of aging and the elderly abound (Allen, 1981; Doka, 1985-86; McTavish, 1971; Palmore, 1977). Research has indicated that children and adolescents to some extent also share these negative stereotypes and informational inaccuracies (Allen, 1981; Burke, 1981-82; Harris, 1975; Hartshorne & Manaster, 1982; Kastenbaum & Durkee, 1964; Page, Olivas, Driver, & Driver, 1981; Palmore, 1977; Seefeldt, Jantz, Galper, & Serock, 1977). Contact with older adults has been proposed as a way to correct the misinformation and stereotypes and has received some success with children (Powers & Weirich, 1982; Trent, Glass, & Crockett, 1979). Among adolescents, the relationship between contact with older adults and misinformation is less clear cut. Some studies have indicated more positive attitudes and increased knowledge with greater contact with older individuals (Baranowski, 1982; Cardland & Kerr, 1977; Kay, Jensen-Osinski, Beidler, & Aronson, 1983; Olejnik & LaRue, 1981; Trent, Glass, & Crockett, 1979). Other studies have indicated either little effect of contact on knowledge of aging or more negative effects on attitudes toward the elderly (Allen, 1981; Auerbach & Levenson, 1977; Baggert, 1980; Ivester & King, 1977).

The purpose of the present study was to compare the knowledge of aging of high school adolescents with the amount and

quality of contact they have with an older individual. A second purpose of the study was to compare the knowledge of aging among adolescents in a 1978 sample (Allen, 1981) with the knowledge of aging in the present 1985 sample. Possible sex differences were also considered. Two hypotheses guided the study. First, consistent with Baranowski (1982) it was hypothesized that the quality of contact rather than the objective amount of contact would be significantly related to the knowledge of aging. Second, it was hypothesized that adolescents in 1985 would have a better knowledge of aging than in 1978.

Method

Sample

Questionnaires were randomly distributed to 75 students in each of four high schools in and around Memphis, TN. The final sample consisted of 213 middle to upper-middle class adolescents (128 males, 85 females). The sample was 92% white, age range 13 to 19 (M = 16.78, SD = 1.54).

Measures

The adolescents were first asked if they had contact with an individual over 65 years of age. If they did, they were asked their relationship to the individual, sex of the individual, and where the individual lived. Knowledge was assessed by Palmore's (1977) "Facts on Aging Quiz" (Table 1). The objective amount of contact and evaluation of the subjective quality of the contact with the older person was determined by two questions from

---

Insert Table 1 about here

Hartshorne & Manaster (1982). The amount of contact was rated on a 7-point scale, 1 indicating almost no contact to 7 indicating that contact occurred just about every day. Evaluation of the subjective quality of contact was rated on a 5-point scale, 1 indicating that the amount of contact was much more than would be wished to 5 indicating that the amount of contact was much less than would be wished.

Results and Discussion

Only 7 of the 213 adolescents sampled did not have contact with anyone age 65 or older. Out of the 206 adolescents that did have contact, 80% chose a grandparent to evaluate, 8% a great grandparent. This is consistent with Burke (1981-82) who found that 99% of young children describe grandparents when asked about an older person. Less than 3% of the adolescents (6 in total) had the experience of living with an older person. Most of the adolescents (95%) reported that the older person had his or her own place to live in the community and were not nursing home residents. Less than 3% (6 in total) reported that the older person lived in a nursing home. Female adolescents tended to pick an older woman to evaluate and male adolescents tended to pick an older man, $\chi^2(1, N=200) = 14.88$, $p < .0001$ (with Yates' correction).

Table 2 provides the sample distribution for the amount of

contact with an older person and the evaluation of quality of contact. The sample was quite varied in terms of the amount of

---

Insert Table 2 about here

---

contact with an older person. The sample was also somewhat skewed toward the positive end on the quality of contact scale, with most of the adolescents either satisfied with the amount of contact they have or wishing they had more. This suggests that in general the adolescents' experiences with older people, especially grandparents, have been positive. At the same time, the results indicate a significant inverse relationship between the amount of contact and the quality of contact for both adolescent males ($r = -.26$, $p = .004$) and females ($r = -.29$, $p = .009$). Hence, even though the overall quality of contact is quite high, those adolescents who have a lot of contact with an older person (i.e., daily contact) report that this is somewhat more than they would wish, while those adolescents who have less contact with an older person (i.e., several times a year or less) report that this is somewhat less than they would wish.

The regression analysis indicated that although the quality of contact was indeed positively related to knowledge of aging, its effects did not quite reach significance (beta = .14, $p = .06$). Objective contact had no effect on knowledge of aging (beta = .08). This lends only tentative support to Baranowski's (1982) contention that the quality of contact is more important

than the quantity of contact.

The means and standard deviations of the variables for the total sample and for each sex are given in Table 3. In general, the adolescents displayed a limited knowledge of the elderly with

---

Insert Table 3 about here

---

an average score of 14 or 56% correct. This is not unusual in studies of adolescents. Doka (1985-86) found an equal level of misinformation about aging among his sample of adolescents, average "Facts on Aging" score of 13 or 52%. These percentages are right around the 50 - 50 chance level. In turn, there were a number of items a majority of the adolescents found very difficult.

Sex differences were not found in the means for the variables given in Table 3 except for the quality of contact with an older person. Female adolescents did rate their quality of contact higher than did the males, $t(197) = -2.88$, $p = .005$. Female adolescents also tended to pick an older woman to evaluate and male adolescents an older man. However, results from a 2-way ANOVA indicate only a significant main effect for sex of adolescent, $F(1,196) = 9.75$, $p = .002$. This suggests that the higher quality of contact reported by female adolescents was independent of the sex of the older person they chose to evaluate.

Consistent with Palmore (1980) who found few differences in

mean scores due to sex, age, or race when education was held constant, mean sex differences in knowledge were not found in this study (see Table 3). However, a result of no mean differences in knowledge of aging can mask important qualitative differences in item responses. Hence, Palmore (1977) suggested looking at the percentage of error for each individual fact of aging. He also suggested that errors on some of the items (items 2, 4, 6, 12, 14) indicate a positive bias toward the elderly and errors on other items (items 1, 3, 5, 7, 8, 9, 10, 11, 13, 16, 17, 18, 21, 22, 24, 25) indicate a negative bias toward the elderly (see Table 1).

Table 4 compares male and female adolescents on the percentage of error for each fact of aging and the positive and negative bias. Table 4 indicates that female adolescents tended

---

Insert Table 4 about here

---

to be more positively biased toward the elderly than the male adolescents (although not quite significant). An example of female adolescents more positive bias is their significantly higher error rate on the fact that all five senses do tend to decline with age (item 2). The female adolescents also tended to make significantly more errors than the males on a workplace related item (item 18, older workers have fewer accidents). The workplace has generally been perceived as a domain in which males have more knowledge than females and due to traditional sex role

socialization they acquire that knowledge at an earlier age. The male adolescents made significantly more errors than the females on a medical community item (item 20, medical practitioners tend to give low priority to the aged). Traditionally males have not generally had to deal with older persons and the medical community as much as have females (e.g., taking grandparents to the doctor).

Table 5 shows a comparison between those adolescents who had high contact with an elderly person and those who had little contact. The high contact group included those adolescents who had contact at least once a week or more with an elderly person (scale 6 or 7). The low contact group included those adolescents who had contact several times a year or less (scale 4, 3, 2, or 1). The analysis of the individual items reveals that the items

---

Insert Table 5 about here

---

which indicate a significantly higher error rate for the low contact group (items 8, 11, and 21) are all associated with a negative bias. All of these items also reflect the adolescent not knowing one elderly person well enough to see that he or she does not fit these negative stereotypes. Perhaps the myths that the elderly have more car accidents (item 8), the rigidity of old age (item 11), and the old in poverty (item 21), reflect the most persistent of the negative stereotypes. The only fact on which the high contact group made more errors than the low contact

group was the myth that over 15% of the U.S. population are now age 65 or over (item 19). This item was the most difficult for the entire adolescent sample. Adolescents in general overestimate the number of elderly people that currently exist. Those adolescents who have a high degree of contact with an elderly person feel that the general population of elderly people is larger than it actually is. This is congruent with the amount of contact they have with an elderly person. An adolescent who has little to no contact with an elderly person is less likely to overestimate the size of the elderly population. Although not quite reaching significance, the high contact group was also both more positively biased and less negatively biased than the low contact group.

Allen (1981) collected data in 1978 relative to the knowledge of aging ("Facts on Aging") and the effects of age/educational level (college, high school, middle school), sex, race, and living with an older person. He found no significant differences between the three age/educational levels and their knowledge of aging. In turn, on eight items, indicated by asterisks in Table 6, all three groups had an over 50% error rate. He concluded that age and education had little effect in correcting misinformation about older people. He also found no significant differences in knowledge of aging (across the

---

Insert Table 6 about here

---

samples), due to sex, race, or living with an older person.

Table 6 shows that the mean error rate is only slightly lower in the 1985 sample (43%) as compared to the 1978 high school sample. In turn, the negative bias among both sexes did not change much between 1978 (M & F = 44.3) and 1985 (M = 43.8, F = 43.7). The positive bias which showed some sex differences in both 1978 and 1985 was reduced between 1978 (M = 30.8, F = 36.0) and 1985 (M = 24.2, F = 28.4). Hence, what changes in educational efforts on aging that have been made between 1978 and 1985 have had little impact on the negative bias held by adolescents.

Table 6 also shows that the eight items which were very difficult in 1978 had the exact same 66% average error rate in 1986. The only misconception which shows a significant improvement over the 7 year period is the belief that most older people are poor (item 21). Adolescents continue to overestimate the number of institutionalized and debilitated elderly (item 7). They still wrongly believe that older persons compose more of the population than they do (item 19), are rigidly set in their ways (item 11), are cantankerous and bored (items 24 and 16), get more than adequate attention from medical practitioners (item 20), and become more religious as they age (item 23). Indeed, the misconception of older people as bored (item 16), cantankerous (item 24), and compose more of the population than they do (item 19), significantly increased between 1978 and 1985.

Adolescents in 1985 as compared with adolescents in 1978

also significantly increased in their misconception of older people as not having sensory declines with age (item 2) and that future elderly will have more health and economic problems than do the present elderly (item 25). The only other fact of aging that improved between 1985 and 1978 is the knowledge that lung vital capacity declines with age (item 4).

Schools are age segregated institutions. Some adults are present, but usually no persons over 65 years of age. As a result, adolescents are isolated from the realities of the normal aging process and are more likely to accept the negative stereotypes of aging and older people that are all too plentiful in our society (Russell, 1979). More systematic effort must be made in schools in order to teach children and adolescents about aging.

There is also the possibility that the extent of misinformation about older people that adolescents display may be indicative of future conflicts between the generations. The present population of adolescents is destined to be a small population of adults that may be burdened by the necessity to support the health and social service needs of a much larger population of elderly (Otten, 1987). Indeed, some of the persistent misconceptions that adolescents have such as older people compose more of the population than they do (item 19), get more than adequate attention from medical practitioners (item 20), and even the significant awareness that older people are doing better economically (item 21) may lay the ground work for

future intergenerational conflict unless more systematic education occurs about all stages in the life course (Kingson, Hirshorn, & Cornman, 1986). Adolescents need to be taught about the diversity of today's older adults and about their own eventual aging process. The focus needs to be placed on the interdependence of the generations, intergenerational transfer and reciprocity of values, knowledge, material goods and services, as well as the increasing diversity across the life course.

Conclusion

This study indicates that more research is needed as to how adolescents perceive older adults and the amount of knowledge they have regarding this fastest growing segment of our population. The present sample answered only 57% of the knowledge items correctly. This indicates a great deal of misinformation or lack of information within the adolescent population concerning the elderly. This also could be indicative of future conflicts since the present population of adolescents is destined to be a small population of adults contending with a much larger population of individuals over 65 in the years 2000-2030 as the post war baby boom reaches old age.

References

Allen, B. J. (1981). Knowledge of aging: A cross-sectional study of three different age groups. Educational Gerontology, 6, 49-60.

Auerbach, D. N., & Levenson, R. L. (1977). Second impressions: Attitude change in college toward the elderly. The Gerontologist, 17, 362-366.

Baggert, S. (1980). Attitudinal consequences of older adult volunteers in the public school setting. Educational Gerontology, 7, 21-31.

Baranowski, M. D. (1982). Grandparent-adolescent relations: Beyond the nuclear family. Adolescence, 17, 565-584.

Burke, J. L. (1981-82). Young children's attitudes and perceptions of older adults. International Journal of Aging and Human Development, 14, 205-222.

Cardland, D. K., & Kerr, S. (1977). The cross generational program at Bucknell University: Older students in an educational setting. Social Education, 494-497.

Doka, K. J. (1985-86). Adolescent attitudes and beliefs toward aging and the elderly. International Journal of Aging and Human Development, 22, 173-187.

Harris, L. (1975). The myth and reality of aging in America. Washington, DC: National Council on Aging.

Hartshorne, T. S., & Manaster, G. J. (1982). The relationship with grandparents: Contact, importance, role conception. International Journal of Aging and Human Development, 15,

233-245.

Ivester, C., & King, K. (1977). Attitudes of adolescents toward the aged. Gerontologist, 17, 85-89.

Kastenbaum, R., & Durkee, N. (1964). Young people view old age. In R. Kastenbaum (Ed.), New thoughts on old age (pp. 237-250). New York: Springer.

Kay, E. J., Jensen-Osinski, B. H., Beidler, P. G., & Aronson, J. L. (1983). The graying of the college classroom. Gerontologist, 23, 196-199.

Kingson, E. R., Hirshorn, B. A., & Cornman, J. M. (1986). Ties that bind: The interdependence of generations. Washington, DC: Seven Locks Press._

McTavish, D. D. (1971). Perceptions of old people: A review of research methodologies and findings. Gerontologist, 11, 90-101.

Olejnik, A. B., & LaRue, A. A. (1981). Changes in adolescents' perceptions of the aged: The effects of intergenerational contact. Educational Gerontology, 3, 339-351.

Otten, A. L. (1987, Jan. 13). Warning of generational fighting draws critics--led by the elderly. The Wall Street Journal, p. 31.

Page, S., Olivas, R., Driver, J., & Driver, R. (1981). Children's attitudes toward the elderly and aging. Educational Gerontology, 7, 43-47.

Palmore, E. (1977). Facts on aging: A short quiz. Gerontologist, 17, 315-320.

Palmore, E. (1980). The facts on aging quiz: A review of findings. Gerontologist, 20, 669-672.

Powers, S., & Weirich, M. C. (1982, Nov.). Project LOVE (let older volunteers educate. Paper presented at the annual meeting of the Gerontological Society of America, Boston.

Russell, J. F. (1979). Aging in the public schools. Educational Gerontology, 4, 19-24.

Seefeldt, C., Jantz, R. K., Galper, A., & Serock, K. (1981). Healthy, happy, and old: Children learn about the elderly. Educational Gerontology, 7, 79-87.

Trent, C., Glass, J. C., & Crockett, J. (1979). Changing adolescent 4-H Club members' attitudes toward the aged. Educational Gerontology, 4, 33-48.

Table 1

Facts on Aging Quiz (Palmore, 1977)

---

1. The majority of old people are senile (i.e., defective memory, disoriented, or demented).
2. All five senses tend to decline in old age.
3. Most old people have no interest in, or capacity for, sexual relations.
4. Lung vital capacity tends to decline in old age.
5. The majority of old people feel miserable most of the time.
6. Physical strength tends to decline in old age.
7. At least one-tenth of the aged are living in long-stay institutions (i.e., nursing homes, mental hospitals, homes for the aged, etc.).
8. Aged drivers have fewer accidents per driver than drivers under 65.
9. Most older workers cannot work as effectively as younger workers.
10. About 80% of the aged are healthy enough to carry out their normal activities.
11. Most old people are set in their ways and unable to change.
12. Old people usually take longer to learn something new.
13. It is almost impossible for most old people to learn something new.
14. The reaction time of most old people tends to be slower than reaction time of younger people.
15. In general, most old people are pretty much alike.
16. The majority of old people report that they are seldom bored.
17. The majority of old people are socially isolated and lonely.
18. Older workers have fewer accidents than younger workers.
19. Over 15% of the U.S. population are now age 65 or over.
20. Most medical practitioners tend to give low priority to the aged.
21. The majority of older people have incomes below the poverty level (as defined by the Federal Government).

22. The majority of old people are working or would like to have some kind of work to do (including housework and volunteer work).

23. Older people tend to become more religious as they age.

24. The majority of old people report that they are seldom irritated.

25. The health and socio-economic status of older people (compared to younger people) in the year 2000 will probably be worse or about the same as that of today's older people.

Note. Even numbered items are true, odd numbered are false.

Table 2

Response Distribution for the Amount of Contact and Quality of Contact

Contact	%	Quality	%
Every day	10	Amount of contact is:	
Once a week	28.5	Much less than I would wish	21
Once a month	27	Somewhat less than I would wish	34
Several times a year	29	About what I would wish	42
Once a year	5	More than I would wish	1
Less than once a year	.5	Much more than I would wish	2
	100%		100%

Table 3

Means, Standard Deviations, and Significance of Sex Differences

Variable	Total[a] Mean(SD)	Males[b] Mean(SD)	Females[c] Mean(SD)	p
Adolescent Age	16.78(1.54)	16.84(1.71)	16.69(1.23)	ns
Older Persons' Age	74.41(6.91)	74.36(7.09)	74.46(6.74)	ns
Objective Contact	5.07(1.11)	5.13(1.13)	4.99(1.08)	ns
Subjective Quality	3.71(.87)	3.57(.85)	3.92(.87)	.005
Knowledge of Aging	14.24(2.78)	14.21(2.83)	14.28(2.72)	ns

[a]N = 213. [b]N = 128. [c]N =85.

Table 4

Percentage of Errors for each Sex on Facts of Aging

Item	Males (N = 128)	Females (N = 85)	p
1	12.5	15.3	ns
2	37.5	57.6	.006
3	46.1	37.6	ns
4	15.6	10.6	ns
5	19.5	20.0	ns
6	8.6	8.2	ns
7*	72.7	75.3	ns
8	42.2	49.4	ns
9	59.4	48.2	ns
10	26.6	22.4	ns
11*	58.6	55.3	ns
12	46.1	52.9	ns
13	10.2	7.1	ns
14	13.3	12.9	ns
15	27.3	27.1	ns
16*	80.5	77.6	ns
17	37.5	47.1	ns
18*	53.9	69.4	.03
19*	85.9	83.5	ns
20*	70.3	56.5	.05
21	24.2	32.9	ns
22	21.9	15.3	ns
23*	74.2	63.5	ns
24*	75.8	72.9	ns
25*	58.6	52.9	ns
M%(SD)	43.16(24.14)	42.86(23.70)	ns
M%(SD) Positive Bias	24.22(14.78)	28.44(21.99)	ns
M%(SD) Negative Bias	43.76(22.21)	43.67(22.45)	ns
Positive-Negative	-19.54	-15.23	

*Items with high error rate (both groups over 50%).

Table 5

Percentage of Errors on Facts of Aging by Levels of Contact

Item	Low Contact (N = 78)	High Contact (N = 79)	p
1	12.8	15.2	ns
2	48.7	48.1	ns
3	42.3	44.3	ns
4	15.4	15.2	ns
5	17.9	21.5	ns
6	5.1	11.4	ns
7*	79.5	68.4	ns
8	59.0	36.7	.009
9*	56.4	53.2	ns
10	28.2	22.8	ns
11	66.7	44.3	.008
12	42.3	55.7	ns
13	5.1	8.9	ns
14	14.1	15.2	ns
15	28.2	30.4	ns
16*	84.6	78.5	ns
17	44.9	39.2	ns
18*	64.1	51.9	ns
19*	80.8	93.7	.03
20*	61.5	72.2	ns
21	38.5	22.8	.05
22	21.8	17.7	ns
23*	70.5	68.4	ns
24*	76.9	73.4	ns
25	48.7	62.0	ns
M%(SD)	44.56(24.58)	42.84(23.87)	ns
M%(SD) Positive Bias	25.12(17.13)	29.12(18.81)	ns
M%(SD) Negative Bias	46.71(23.90)	41.30(21.27)	ns
Positive-Negative	-21.59	-12.18	

*Items with high error rate (both groups over 50%).

Table 6

Percentage of Errors on Facts of Aging in 1978 and 1985

Item	1978 (N = 87)	1985 (N = 213)	p
1	31	14	ns
2	36	45	.001
3	52	43	ns
4	37	14	.001
5	37	20	ns
6	9	8	ns
7*	74	74	ns
8	40	45	ns
9	72	55	ns
10	38	25	ns
11*	64	57	ns
12	55	49	ns
13	14	9	ns
14	10	13	ns
15	41	27	ns
16*	66	79	.01
17	51	41	ns
18	48	60	ns
19*	72	85	.01
20*	52	65	ns
21*	67	28	.001
22	15	19	ns
23*	78	70	ns
24*	62	75	.05
25	32	56	.001
M%(SD)	46.1(20.2)	43.0(23.6)	ns
M%(SD) Positive Bias	29.4(17.6)	25.8(17.5)	ns
M%(SD) Negative Bias	47.7(18.5)	43.8(22.0)	ns
Positive-Negative	-18.3	-18.0	

*Items with high error rate (from Allen, 1981).